What is claimed is:

1. A system for electronically delivering information content to requesting clients for selected charges, said system serving clients having an associated balance equaling the real time accumulated charges imposed on each said client for delivery of said requested

5 content, said system comprising in combination,

    a) a plurality of plans, each one of said plans comprising

        i)   a plurality of accessible content elements, each one of said accessible content elements comprising downloadable content elements,

        ii)   a specific charge being imposed on said clients for obtaining selected

10   accessible content elements;

    b) a plurality authorized identities, each one of said authorized identities being associated with one of said plans,

    c) authentication means for associating one of said clients with one of said authorized identities, a client associated with an authorized identity being

15   permitted access to the accessible content elements defined by the plan with which said authorized identity is associated;

    d) access control means for determining, prior to delivery of said content, whether said a requesting client is authorized access to said requested content, wherein the access authority of any one of said clients may be different from the access

20   authority of a different client;

    e) real time charging means for determining, prior to delivery of said content, the amount of any charge that may apply for the delivery of said content to said client wherein, for any specific instances of said content, said charge may be different for different clients;

25   f) localized delivery means for providing requested content to requesting clients wherein the system maintains full control of delivery of information content to the network at all times; and

    g) real time reconciliation means for adding the amount of any said charge to said requesting client's associated accumulated charge balance at the time of delivery

30   of said content to said requesting client, and wherein said charge is not added in the event that delivery of the content is not made,

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whereby content is organized and priced to the needs of specific market segments, and said content is offered to multiple of such segments simultaneously, such that the charges for said content are processed with speed and with a minimum interruption to clients.

5   **2.** The system of Claim 1 wherein each said charge has an interval component, a usage component, or both, wherein the value of said components may be zero, and wherein said interval component may include a plurality of relationships between an interval of time and an amount,

whereby charges may be defined in precise terms for each said plan.

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3. The system of Claim 1 wherein each one of said authorized identities is associated with a group comprising

    a)   an associated plan;

    b)   a discount, wherein any charge associated with said plan is multiplied by said

15   discount and applied to user identities associated with said group;

    c)   an interval charge, wherein said interval charge is applied to user identities associated with said group,

whereby each said group simplifies the association with large numbers of user identities with a set of offered plans.

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4. The system of Claim 1 wherein each said client further has an available resource balance reflecting the resources available to said client for paying charges imposed by said system, said system further comprising

    a)   real time comparing means for determining if the amount of said available

25   resource balance is sufficient to pay any charge computed by said real time charging means;

    b)   and wherein a real time reconciliation means further adjusts said available resource balance to reflect payment of any said computed charge,

whereby said system is able to determine each client's ability to pay charges and

30   condition delivery of requested information content elements on said determination.

5. The system of Claim 4 wherein each of said accessible content element further includes an associated usage credit amount, and wherein each of said plans further includes a credit allowance flag, wherein if said credit allowance flag of the plan associated with said requesting client is defined as true, said requesting client's associated available resource balance will be adjusted to reflect the deposit of any said usage credit amount associated with said requested information content element, whereby said system may be used to create financial incentives to users for requesting specified information content elements, as well as imposing costs.

6. The system of Claim 4 wherein each of said plans further includes an initial amount, wherein said amount is periodically added to the available resource balance of each client associated with said plan,
whereby each plan may offer a specified number of said information content elements to subscribers at no additional charge, since their payment will be covered by the periodic deposit of the initial amount to each user's available resource balance.

7. The system of Claim 4 wherein said available resource balance amount is equal to the total of additions minus imposed charges,
whereby the amount available to a client is determined by the cumulative amount of unpaid charges and an amount pre-paid by the client, providing flexibility to adjust the credit depending on the financial risk associated with said client.

8. The system of Claim 4 wherein each of said requesting clients further includes a credit limit amount and wherein said available resource balance amount is equal to said credit limit minus the total of imposed charges minus additions,
whereby the amount available to a client is determined by the cumulative amount of unpaid charges and a specified credit limit, providing flexibility to adjust the credit depending on the financial risk associated with said client.

9. The system of Claim 4 wherein each of said requesting clients further includes a debit balance, a credit balance and a credit limit, wherein said debit account balance equals the

total deposits made to said debit balance minus the total withdrawals made from said debit balance plus said credit limit minus the amount of said credit balance, wherein the available amount of said balance being equal to the amount of the debit balance plus the credit limit minus the credit balance, and wherein said real time reconciliation means

5   adjusting the amount of said account by first reducing the debit balance and next, if necessary, increasing the credit balance,
whereby content providers can tailor each client's account to the proper mix of pre-payment requirements and extended credit.

10   **10.** The system of Claim 5 wherein each one of said plans includes a discount that can be of a fixed amount, an amount dependent upon a cumulative measurement of usage, or a combination of the two,
whereby each plan may be more easily reused by multiple groups, and each user associated with a specified plan may be given an incentive to consume additional

15   resources in return for an increased overall discount on imposed charges.

11. A system for electronically delivering information content to requesting clients, wherein said system may impose a charge for delivering said content, and wherein the identity of said clients is known to said system, said system comprising

20   a)   one or more accounts, each one of said accounts holding an amount equal to the funds available for the payment of charges by authorized clients, wherein one or more of said authorized clients has the ability to withdraw funds from one of said accounts to pay for charges imposed for requested and delivered content, and wherein each one of said accounts may restrict the total of funds withdrawn by

25   one of said authorized clients;
       b)   charge-computing means for determining, prior to delivery of said content, the amount of any pending charge wherein said charge applies to the delivery of said content to said client wherein, for any specific instances of said content, said charge may be different from the charge imposed on a different client;

30   c)   payment means for ensuring, prior to delivery of said contents, that the available amount of a client's associated account is greater than or equal to any pending

charge, and that the amount of any pending charge when added to the accumulation of charges previously imposed on said client is less than any said withdrawal restriction on said account applying to said client;

    d) delivery means for providing requested content to requesting clients; and

5   e) reconciliation means for adjusting said the amount of said account to reflect the payment of any charge imposed on said client for delivery of said content to said requesting client,

whereby charges imposed by delivery of content to selected requesting clients may be paid for by a single collective account such that the party responsible for funding said

10 collective account is protected from excess charges incurred by any specific requesting client.

12. The system of Claim 11 wherein the amount of each of said accounts equals the total deposits made to said balance minus the total withdrawals made by said authorized

15 clients from said balance, and wherein said reconciliation means adjusting the amount of said account by deducting any imposed charges from said account.

13. The system of Claim 11 wherein each of said accounts also includes a credit limit, wherein said account amount equals the amount of said credit limit minus the total

20 deposits plus the total withdrawals made by said authorized clients from said balance, and wherein said reconciliation means adjusts the amount of said account by deducting any imposed charges from said account,

whereby content providers can construct organizational accounts that extend credit based on the credit risk of each organization with respect to each specific content provider.

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14. The system of Claim 11 wherein each of said accounts comprises a debit balance, a credit balance and a credit limit, wherein said account balance equals the total deposits made to said debit balance minus the total withdrawals made from said debit balance plus said credit limit minus the amount of said credit balance, wherein the available amount of

30 said balance being equal to the amount of the debit balance plus the credit limit minus the

credit balance, and wherein said reconciliation means adjusts the amount of said account by first reducing the debit balance and next, if necessary, increasing the credit balance, whereby content providers can construct organizational accounts that reflect a mixture of pre-payment and extended credit based on the credit risk of each organization with respect to each specific content provider.

15. In a system for electronically delivering information content to requesting clients, wherein said system imposes a charge for delivering said content to said requesting clients, each requesting client has a temporary account wherein the initial balance of said account being is to zero, and each requesting client has a remote account wherein said client may conduct financial transactions with said remote account through specified payment vendors, a method comprising

    a) prior to delivering said requested account, computing the charge that applies to a requesting client for requested content;

    b) determining if the amount of said temporary account balance is equal to or greater than computed pending charge;

    c) if said pending charge is less than said temporary account balance, deducting the amount of said pending charge from the amount of said temporary account balance;

    d) if said charge exceeds the amount of said temporary account balance, presenting said client with the opportunity to enter a payment request and if said request is entered, forwarding said payment request to an appropriate payment vendor, and if said payment vendor provides funds, depositing said funds into said client's temporary account, and if said temporary balance including said deposited funds exceed or equal the amount of the pending charge, deducting the amount of said pending charge from the amount of said temporary account balance;

    e) if said client elects to close said client's temporary account, transferring any excess of funds in said temporary account balance to said client's remote account; and,

f) if said client ceases to produce requests for content for a specified period of time, closing said client's temporary account, transferring any excess funds in said temporary account balance to said user's remote account,

whereby clients who have not registered with a content provider may be encouraged to

5   purchase with greater frequency than they otherwise would, and whereby content providers may conduct transactions with such clients in a manner that reduces the transaction charges that would normally be incurred when non-registered clients are involved.

10   **16.** In a system for electronically delivering information content elements to requesting clients, wherein different clients have access to different sets of information content elements, a method comprising

a) upon receiving a client's initial request, establishing a session and associating an anonymous user identity with said session;

15   b) ensuring that each subsequent client request is uniquely associated with a session;

c) allowing access to information content elements to clients with proper access rights;

d) if a requesting client does not have proper access rights;

i)   denying access to information content elements by said client,

20   ii)   prompting said client to enter authentication credentials,

iii)   authenticating said client, and,

iv)   if said authentication is successful, associating said client's existing session with said new identity, and continuing to process said client's request for said information content element,

25   whereby visitors are not required to login to obtain access, users may easily create and use browser bookmarks to obtain content, and multiple identities may be employed to minimize unnecessary exposure of content to unauthorized access.

17. A method for enabling an online system to serve information content to requesting

30   clients, comprising the steps

a) receiving a request for said information content from a client;

b) determining if the delivery of an item of information content will result in a charge being imposed on said client;

c) if said charge is greater than zero, prior to delivering said information content to said client, presenting to said client a notice describing the amount of said pending charge and, optionally, the cumulative total of said client's purchases and said client's current charge balance;

d) enabling said client to choose whether or not to proceed with the delivery of said item of information content and imposing said charge;

e) permitting said client to terminate said request for said item of content; and

f) enabling said client to elect to have such a notice and choice to cancel delivery of said content for each request and enabling said client to elect not to have said notice and choice presented for each request,

whereby clients who are concerned about the accumulation of large charges may exercise direct control of said charges, while other clients may forego said control to achieve more streamlined operation.

18. A method as in Claim 17 further including the step of determining whether or not to have said notice and choice presented based on whether said charge exceeds a threshold value, said threshold value being definable and changeable by said requesting user, whereby clients who are concerned about the accumulation of large charge amounts may exercise a balance between notification and streamlined operation by their choice of a notification threshold based on the amount of any pending charge.

19. A method as in Claim 17 further including the step of determining whether or not to have said notice and choice presented based on whether the amount of said client's accrued charges exceeds a threshold value, said threshold value being definable and changeable by said client,

whereby clients who are concerned about the accumulation of large charge amounts may exercise a balance between notification and streamlined operation by their choice of a notification threshold based on the amount of accumulated charges.

20. In an online system for providing services to requesting clients, said system establishing and maintaining a session for each requesting client, said session being suspended after an initial period of inactivity by said requesting client, and said session being terminated after a subsequent additional period of inactivity by said requesting client, a method comprising

   a) receiving a request from a client whose session is suspended

      i)   prompting said client for credentials to authenticate;

      ii) authenticating said credentials; and,

      iii) if the authentication is successful, restoring said client's suspended session to active status and continuing to process said request;

   b) receiving a request from a client whose session has been terminated

      i)   prompting said client for credentials to authenticate;

      ii) authenticating said credentials; and,

      iii) if authentication is successful, creating a new session and continuing to process said request;

   c) receiving a request from said client which has no associated session

      i)   creating a new session;

      ii) associating said request with a default (anonymous) user identity and continuing to process said request (and alternatively, prompting the client for credentials and requiring a login),

whereby said system can improve security by minimizing the time that an inactive connection is accessible yet still providing clients whose session has timed-out with the capability to quickly and easily resume their session activity.

21. In an online system for delivering information content elements to requesting clients, said system providing multiple subscription plans, and said users being authenticated in order to access said content elements, a method comprising,

   a) presenting said client with the option to register for one of a selected set of subscription plans that are different from the subscription plan with which the client is currently associated;

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b) receiving said client's registration information and determining said client's suitability to become a subscriber of the requested new subscription plan, wherein the criteria for subscription suitability differs for different subscription plans;

5 c) upon determining the client is suitable for subscribing the requested subscription plan, generating a unique activation code and associating that with said client, and changing said client to new plan;

d) communicating said activation code to said client in a manner verifying specified elements of said client's registration information, wherein said

10 elements to be verified and the means for conducting said communication being specific to the requirements of the new subscription plan;

e) processing client's authentication requests wherein the password provided by said client fails to authenticate, determining if said password matches said associated authentication code;

15 f) if said password matches said associated authentication code, changing said user's plan permanently to the selected plan; and,

g) if said client's password fails to match the stored credentials, and said password fails to match said activation code, or if said activation expiration date has been exceeded, reverting user back to previous plan,

20 whereby content providers may offer incentives that encourage clients to shift their subscription to plans providing more revenue to said content provider.

22. In a system for electronically providing services to requesting clients, a method comprising

25 a) detecting the onset of load conditions;

b) selectively adding specified delays to the processing of requests for different categories of requesting clients;

c) detecting when overload conditions are reduced; and,

d) selectively removing added processing delays,

whereby said system may continue to provide responsive service to higher priority during times of heavy network congestion, including congestion caused by denial of service attacks.

5   **23.** In a system for electronically providing services to requesting clients, said system maintaining a plurality of user accounts, each of said accounts containing unique identification credentials, a method comprising,

       a) prior to delivering said services, ensuring that requesting client is authenticated, said authenticated client being identified with a specific user account;

10   b) upon receiving a request from a requesting client that has not been authenticated, requesting authentication credentials from said client;

       c) if requested authentication credentials are provided by said requesting client, attempting to authenticate said new requesting client against an account, wherein said credentials provided by said requesting client match the unique identification

15   credentials associated with one of said accounts;

       d) if said account that contains credentials matching the credentials provided by said requesting client, prohibits concurrent use of said account, and if another client has been authenticated against said same account and is currently using said system, denying said requesting client access to said system; and,

20   e) as may be specified by said system, applying additional actions comprising,

          i)   imposing a fee on said account;

          ii)   changing the password of said account and informing said requesting client of the new password; and,

          iii)   disabling said user account, wherein subsequent authentications will be

25   rejected,

whereby clients who improperly share an account will be detected and discouraged from continuing said sharing because the cost of imposed charges, the difficulty of keeping track of system-generated password changes, or the loss of access due to the account being disabled.

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24. In a system for electronically delivering information content to requesting clients, said system comprising a plurality of plans, each ones of said plans comprising a plurality of accessible content elements, said accessible content elements comprising downloadable elements; said clients each having access to an associated charge balance; and a plurality of authorized identities, each of one of said authorized identities being associated with one of said plans, said method comprising

    a) linking a requesting client with one of said authorized identities;

    b) permitting a client associated with an authorized identity access to the accessible content elements defined by the plan with which said authorized identity is associated;

    c) limiting access of said requesting clients to content to which said client has been granted access, wherein the access granted to any one of said clients may be different from the access granted to a different client;

    d) computing, prior to delivery of said content, the amount of any charge that may apply for the delivery of said content to said client wherein, for any specific instances of said content, said charge may be different from the charge imposed on a different client;

    e) delivering the requested content to requesting clients; and

    f) if delivery is completed successfully, adding the amount of any said charge to said requesting client's associated accumulated charge balance at the time of delivery of said content to said requesting client,

whereby content is organized and priced to the needs of specific market segments, and said content offered to multiple of such segments simultaneously, and the charges for said content are processed with speed and with a minimum interruption to clients.

25. A system for electronically delivering information content to requesting clients, the system comprising

    a) a plurality of plans, each of which plans comprises

        i) a plurality of accessible content elements, each of which accessible content elements is a downloadable content element or plurality of downloadable content elements;

ii)   a charge that is imposed for obtaining selected accessible content
elements;

b) authorized identities, each of which authorized identity is associated with a
said plan, wherein each said client associated with one of said authorized

5   identities is granted access to the accessible content elements defined by the
plan with which said authorized identity is associated;

c) processing means for delivering content to requesting clients based on the
access rights and charges specified by the plan associated with said client's
associated authorized identity;

10   d) post-processing means for ensuring that, after delivery of said information
content is attempted, charges are not applied for content that is not properly
delivered as when a transmission error occurs;

e) chaining means for causing a new request to be processed by the system
without further communications with the requesting client, wherein said new

15   request is issued after the original request has been processed.

26. A system for electronically delivering information content to requesting clients,
wherein

a) said system comprises a single server computer; and

20   b) said system may be hosted on a shared computer provided by a third-party
web hosting vendor under a shared web-hosting service offering, wherein said
system requires no proprietary server connections other than those provided
under typical shared web hosting service;

and the system comprising

25   c) a plurality of plans, each of which plans comprises

i)   a plurality of accessible content elements, each of which accessible
content elements is a downloadable content element or plurality of
downloadable content elements;

ii)   a charge that is imposed for obtaining selected accessible content

30   elements;

d) authorized identities, each of which authorized identities is associated with a plan, wherein each said client associated with said authorized identity is granted access to the accessible content elements defined by the plan with which said authorized identity is associated; and,

5   e) processing means for delivering content to requesting clients based on the access rights and charges specified by the plan associated with said client's associated authorized identity.

27. A client-server system including a server that electronically provides services to
10 requesting clients, wherein each one of said clients has access to an account balance specified for use in paying charges associated with delivery of said requested service, said server comprises

access control means for determining, prior to delivery of said service, whether said clients are authorized access, wherein the access authority of any one of said
15 clients may be different from the access authority of a different client;

charging means for determining, prior to delivery of said service, the amount of any charge that may apply for the delivery of said service to said client wherein, for any specific instances of said service, said charge may be different from the charge imposed on a different client;
20 payment means for determining, prior to delivery of said service, if said requesting client's account balance is sufficient to cover any said charge;

delivery means for providing requested service to requesting clients; and, reconciliation means for deducting any said charge from said requesting client's account balance at the time of delivery of said service to said requesting client.
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28. A method for electronically providing services from a server to requesting clients comprising

a) providing an accessible account balance for each of said clients, which account balance is useable for paying charges associated with delivery of said requested
30   service;

b) determining if a requesting client has been authorized to access said requested service , wherein the access authority of any one of said clients may be different from the access authority of a different client;

c) computing any charge that may be imposed to deliver said service to said requesting client wherein, for any specific instances of said service, said charge may be different from the charge imposed on a different client;

d) determining if said client's account balance is sufficient to cover any said charge;

e) delivering said requested service to said requesting client;

f) adjusting said client's account balance to reflect any said computed charge.

29. A system for delivering information content elements to clients of the system requesting selected content elements, said system utilizing an internal data structure to define the access rights of said clients and the charges to impose upon said clients, said internal data structure comprising

a) a multiplicity of information content objects,

b) a plurality of user data objects, each one of which user data objects being linked to a single group data object;

c) a plurality of group data objects, each one of said group objects being linked to a single plan data object;

d) a plurality of resource data objects, each one of said resource data objects including a price and each one of said resource data objects being linked to a plan data object and to one or more information content objects;

e) said system interpreting said relationships between said data objects such that all user data objects linked to the same group data object have access to the same information content elements, and all information content elements accessible to user data objects linked to a single group data object having the same price;

f) said system associating each one of said requesting clients with a specific one of said user data objects;

g) said system granting said clients access to accessible content elements via links between

i)   said user data object, said group data object to which said user object is linked;

ii)   said plan object to which said group data object is linked, said resource data object linked to said plan data object; and

iii)   said content element linked to said resource data object; and,

h)   wherein said system imposes charges on said requesting clients as defined by the effective prices in the link provided by the system to the requesting client.

30. A content merchandizing system for electronically delivering content to requesting clients, said system including a plurality of subscription plans each having accessible information content elements and a charge, said system controlling access and imposing charges based on the subscription plan with which said requesting client is associated, said system further including remote retrieval means for selectively obtaining said content requested by said requesting client from a different online system, said remote retrieval means performing as a client in requesting content from said different system, whereby said system provides subscription plan-based access control and pricing for some or all content served by said different online system, without interfering with said different system's operation, or duplicating its data sources.

31. The system of Claim 30 wherein said system further includes request translation means for translating requested content into requests for content from said different system
whereby said system's interaction with said different system may be made completely transparent to said system's requesting clients.

32. The system of Claim 30 wherein said system further includes local retrieval means for obtaining requested content from content sources residing on, accessible from, or generated by, said system,
whereby said system serves requesting clients with requested content that consists of an integration of locally and remotely retrieved content.

33. A system for electronically providing services to requesting authenticated clients, said system comprising,

   a) local authentication means for verifying the identities of said clients directly by matching of credentials supplied by said client with those held by said system,

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   b) one or more external authenticating means supported by such system for verifying the identities of said clients by means external to said system,

   c) said system maintaining access, formatting and processing means specific to each one of said external authentication means,

   d) authentication selection means for providing clients with the option of using said

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   local authentication means or external authentication means,

whereby any of said clients may gain access to said system services through said local authentication means or through an external means depending on a client's requirements or the availability of an external means.